

Listing of Claims:

Claim 1 (Canceled).

2. (Currently Amended) ~~The~~ A toner conveyance device ~~of~~
~~claim 1, further for conveying toner particles,~~ comprising:

a toner mixing unit which includes a toner introducing
portion to introduce toner particles, and which mixes the toner
5 particles introduced from the toner introducing portion with air
to make a toner fluid;

a first conveyor for receiving the toner fluid produced in
the toner mixing unit and conveying the toner fluid;

a toner separation unit which separates the toner fluid
10 conveyed by the first conveyor into the air and the toner
particles, and which includes a toner discharging portion for
discharging the separated toner particles;

a second conveyor for conveying the air separated by the
toner separation unit back to the toner mixing unit;

15 a tightly closed circulation path for the air, which starts
at the toner mixing unit, leads to the toner separation unit
through the first conveyor, and returns to the toner mixing unit
through the second conveyor; and

a controller for detecting a conveyance amount of the toner

20 fluid ~~of~~ by the first conveyor and controlling a conveyance
amount of the air ~~of~~ by the second conveyor based on ~~the basis of~~
the conveyance amount of the toner fluid.

3. (Currently Amended) The toner conveyance device of
claim 2, wherein the controller ~~detects the conveyance amount of~~
~~the toner fluid of the first conveyor and controls to make~~
~~constant~~ a ratio of the conveyance amount of the toner fluid to
5 the conveyance amount of the air ~~of~~ by the second conveyor to be
constant.

4. (Currently Amended) The toner conveyance device of
claim 2, wherein ~~the controller detects the conveyance amount of~~
~~the toner fluid of the first conveyor, and~~ when the conveyance
amount of the toner fluid is not greater than a target conveyance
5 amount, the controller increases the conveyance amount of the air
~~of~~ by the second conveyor.

5. (Currently Amended) The toner conveyance device of
claim 2, wherein ~~the controller detects the conveyance amount of~~
~~the toner fluid of the first conveyor, and~~ when the conveyance
amount of the toner fluid is not greater than a target conveyance
5 amount, the controller stops the first conveyor and the second
conveyor.

6. (Currently Amended) The toner conveyance device of claim 2, further comprising a warning device for giving a warning ~~, wherein the controller detects the conveyance amount of the toner fluid of the first conveyor, and when the conveyance amount~~
5 of the toner fluid is not greater than a target conveyance amount ~~, the controller controls the warning device to give a warning.~~

7. (Currently Amended) The toner conveyance device of claim 2, wherein the controller controls a toner introduction amount ~~of~~ by the toner introducing portion based on ~~the basis of~~ the conveyance amount of the toner fluid ~~of~~ by the first conveyor.

8. (Currently Amended) ~~The~~ A toner conveyance device ~~of claim 1, the~~ for conveying toner particles, comprising:

a toner mixing unit which includes a toner introducing portion to introduce toner particles, and which mixes the toner
5 particles introduced from the toner introducing portion with air to make a toner fluid;

a first conveyor, which comprises a pump motor, for receiving the toner fluid produced in the toner mixing unit and conveying the toner fluid;

10 a toner separation unit which separates the toner fluid
conveyed by the first conveyor into the air and the toner
particles, and which includes a toner discharging portion for
discharging the separated toner particles;

15 a second conveyor, which comprises a pump motor, for
conveying the air separated by the toner separation unit back to
the toner mixing unit;

20 a tightly closed circulation path for the air, which starts
at the toner mixing unit, leads to the toner separation unit
through the first conveyor, and returns to the toner mixing unit
through the second conveyor; and

~~a controller which respectively detects and controls each of~~
~~the a number of rotations of each said pump motors constituting~~
~~motor of the first conveyor and the second conveyor ,~~
~~respectively.~~

9. (Currently Amended) ~~The~~ A toner conveyance device ~~of~~
~~claim 1,~~ for conveying toner particles, comprising:

5 a toner mixing unit which includes a toner introducing
portion to introduce toner particles, and which mixes the toner
particles introduced from the toner introducing portion with air
to make a toner fluid;

a first conveyor for receiving the toner fluid produced in
the toner mixing unit and conveying the toner fluid;

10 a toner separation unit which separates the toner fluid
conveyed by the first conveyor into the air and the toner
particles, and which includes a toner discharging portion for
discharging the separated toner particles;

15 a second conveyor for conveying the air separated by the
toner separation unit back to the toner mixing unit; and

15 a tightly closed circulation path for the air, which starts
at the toner mixing unit, leads to the toner separation unit
through the first conveyor, and returns to the toner mixing unit
through the second conveyor;

20 wherein each of the first conveyor and the second conveyor
has a conveyance path of toner particles, at least a part of each
said conveyance path is formed of by a flexible pipe at least
partially made of one of resin or and rubber, and a member made
of metal member is wound around an outer surface of at least a
part of the flexible pipe, and the metal member is grounded.

10. (Currently Amended) The toner conveyance device of
claim 9, wherein at least a part of the flexible pipe is made of
metal [[,]] and ~~the pipe made of metal is grounded.~~

11. (Currently Amended) The toner conveyance device of
claim 9, wherein at least a part of the flexible pipe is made of

~~a flexible member made of one of~~ silicone rubber ~~or and~~
fluorinated resin.

12. (Currently Amended) ~~The A~~ toner conveyance device ~~of~~
~~claim 1,~~ for conveying toner particles, comprising:

a toner mixing unit which includes a toner introducing
portion to introduce toner particles, and which mixes the toner
5 particles introduced from the toner introducing portion with air
to make a toner fluid;

a first conveyor for receiving the toner fluid produced in
the toner mixing unit and conveying the toner fluid;

a toner separation unit which separates the toner fluid
10 conveyed by the first conveyor into the air and the toner
particles, and which includes a toner discharging portion for
discharging the separated toner particles;

a second conveyor for conveying the air separated by the
toner separation unit back to the toner mixing unit; and

15 a tightly closed circulation path for the air, which starts
at the toner mixing unit, leads to the toner separation unit
through the first conveyor, and returns to the toner mixing unit
through the second conveyor;

wherein the toner mixing unit ~~has~~ comprises a toner detector
20 for detecting an amount of toner therein, and when the toner
detector detects that an amount of toner accumulated in the toner

mixing unit exceeds a prescribed amount, ~~the~~ a controller stops the first conveyor and the second conveyor.

13. (Currently Amended) ~~The~~ A toner conveyance device ~~of claim 1,~~ for conveying toner particles, comprising:

a toner mixing unit which includes a toner introducing portion to introduce toner particles, and which mixes the toner particles introduced from the toner introducing portion with air to make a toner fluid;

a first conveyor for receiving the toner fluid produced in the toner mixing unit and conveying the toner fluid;

a toner separation unit which separates the toner fluid conveyed by the first conveyor into the air and the toner particles, and which includes a toner discharging portion for discharging the separated toner particles;

a second conveyor for conveying the air separated by the toner separation unit back to the toner mixing unit; and

a tightly closed circulation path for the air, which starts at the toner mixing unit, leads to the toner separation unit through the first conveyor, and returns to the toner mixing unit through the second conveyor;

wherein the toner mixing unit ~~has~~ comprises a toner detector for detecting an amount of toner therein, and when the toner detector detects that an amount of toner accumulated in the toner

mixing unit exceeds a prescribed amount, ~~the~~ a controller gives a warning.

14. (Currently Amended) ~~The~~ A toner conveyance device ~~of~~
~~claim 1,~~ for conveying toner particles, comprising:

a toner mixing unit which includes a toner introducing
portion to introduce toner particles, and which mixes the toner
5 particles introduced from the toner introducing portion with air
to make a toner fluid;

a first conveyor for receiving the toner fluid produced in
the toner mixing unit and conveying the toner fluid;

a toner separation unit which separates the toner fluid
10 conveyed by the first conveyor into the air and the toner
particles, and which includes a toner discharging portion for
discharging the separated toner particles;

a second conveyor for conveying the air separated by the
toner separation unit back to the toner mixing unit; and

15 a tightly closed circulation path for the air, which starts
at the toner mixing unit, leads to the toner separation unit
through the first conveyor, and returns to the toner mixing unit
through the second conveyor;

wherein the toner separation unit ~~has~~ comprises a toner
20 detector for detecting an amount of toner therein, and when the
toner detector detects that an amount of toner accumulated in the

toner separation unit exceeds a prescribed amount, ~~the~~ a controller stops the first conveyor and the second conveyor.

15. (Currently Amended) ~~The~~ A toner conveyance device of ~~claim 1,~~ for conveying toner particles, comprising:

a toner mixing unit which includes a toner introducing portion to introduce toner particles, and which mixes the toner particles introduced from the toner introducing portion with air to make a toner fluid;

a first conveyor for receiving the toner fluid produced in the toner mixing unit and conveying the toner fluid;

a toner separation unit which separates the toner fluid conveyed by the first conveyor into the air and the toner particles, and which includes a toner discharging portion for discharging the separated toner particles;

a second conveyor for conveying the air separated by the toner separation unit back to the toner mixing unit; and

a tightly closed circulation path for the air, which starts at the toner mixing unit, leads to the toner separation unit through the first conveyor, and returns to the toner mixing unit through the second conveyor;

wherein the toner separation unit ~~has~~ comprises a toner detector for detecting an amount of toner therein, and when the toner detector detects that an amount of toner accumulated in the

toner separation unit exceeds a prescribed amount, ~~the~~ a controller gives a warning.

16. (Currently Amended) ~~The~~ A toner conveyance device of ~~claim 1,~~ for conveying toner particles, comprising:

a toner mixing unit which includes a toner introducing portion to introduce toner particles, and which mixes the toner particles introduced from the toner introducing portion with air to make a toner fluid;

a first conveyor for receiving the toner fluid produced in the toner mixing unit and conveying the toner fluid;

a toner separation unit which separates the toner fluid conveyed by the first conveyor into the air and the toner particles, and which includes a toner discharging portion for discharging the separated toner particles;

a second conveyor for conveying the air separated by the toner separation unit back to the toner mixing unit; and

a tightly closed circulation path for the air, which starts at the toner mixing unit, leads to the toner separation unit through the first conveyor, and returns to the toner mixing unit through the second conveyor;

wherein the toner separation unit ~~has~~ comprises a through passage for ~~making~~ causing the toner fluid to meander.

17. (Currently Amended) An image forming apparatus comprising ~~a~~ the toner conveyance device as set forth in claim [[1]] 2.

18. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 8.

19. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 9.

20. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 12.

21. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 13.

22. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 14.

23. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 15.

24. (New) An image forming apparatus comprising the toner conveyance device as set forth in claim 16.